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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/901,338	07/28/97	KEESMAN G	PHB-33946A

EXAMINER	
RAO, A	
ART UNIT	PAPER NUMBER
2713	42

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant
08/901,338	Keesman
Examiner	**Group Art Unit**
Anand Rao	2713

☒ Responsive to communication(s) filed on *Nov 2, 1999*

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-12 and 14* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-12 and 14* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on *Jul 28, 1997* is ☒ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Part III DETAILED ACTION

Continued Prosecution Application

1. The request filed on 11/02/99 as Paper 34 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No.08/901,338 is acceptable and a CPA has been established. An action on the CPA follows.

2. Applicant's arguments with respect to claims 1-12 and 14 as filed in Paper 34 on 11/02/99 have been considered but are moot in view of the new ground(s) of rejection that deal with the "decoder buffer" limitations now appearing in these claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-12 and 14 rejected under 35 U.S.C. § 102(e) as being anticipated by Kirayama.

Kirayama discloses a method of compression for transmission of an encoded digital video signal bit stream (Kirayama: column 6, lines 65-68), comprising the steps of: detecting a first bit rate of the encoded digital video signal bit stream (Kirayama: column 6, line 50-60); sequentially writing the encoded digital video signal bit stream into a buffer at said first bit rate (Kirayama: column 6, lines 30-40); deriving a second bit rate as a percentage of the first bit rate, changes in which percentage are inversely related to changes in the first bit rate (Kirayama: column 6, lines

20-30 & 63-68); and reading out the encoded digital video signal bit stream from the buffer at the second bit rate and transmitting the encoded digital video data to a decoder buffer at said second bit-rate (Kirayama: column 9, lines 63-68; column 10, lines 1-42), wherein both the first and second bit rates are variable (Kirayama: column 6, lines 64-68) in claim 1.

Regarding claim 2, Kirayama discloses that the second bit rate can equal the first bit rate for a specified range of first bit rate values (Kirayama: column 6, lines 60-68; column 11, liens 1-1-26) as in the claim.

Regarding claim 5, Kirayama discloses a video signal apparatus operable to encode a digital video signal for transmission, the apparatus comprising: an encoder stage (Kirayama: column 11, lines 30-55) for encoding a received video signal according to a predetermined coding scheme (Kirayama: column 11, lines 30-46) and outputting the signal as a variable bit-rate data stream (Kirayama: column 6, lines 53-56); a buffer coupled to receive said variable bit-rate data stream from the encoder and arranged to output a data signal for transmission (Kirayama: column 6, lines 20-39); characterized by means operable to detect the bit rate of the variable bit-rate data stream (Kirayama: column 6, lines 35-60), to derive a second bit-rate as a percentage of the encoder stage output bit-rate, which percentage changes in inverse relation to the changes of the encoder stage output rate (Kirayama: column 9, lines 63-68; column 10, lines 1-42), and to control the buffer output data signal bit rate at said second bit-rate and to transmit the output data signal to a decoder buffer at the second bit rate; wherein said first and second bit-rates are variable (Kirayama: column 6, lines 61-68; column 7 lines 1-10), as in claim 5.

Regarding claims 3, 7, and 9, Kirayama further discloses using a detected first bit-rate based on successive groupings of frames of input video signals for the derivation of the second bit-rate (Kirayama: column 5, lines 4-17) as claimed.

Regarding claims 4 and 6, the Kirayama apparatus has signals encoded according to the MPEG standard (Kirayama: column 11, lines 30-55), as in the claims.

Regarding claim 8, the Kirayama apparatus discloses using a detected first bit-rate based on successive groupings of frames of input video signals as explained above, is characterized in that the instantaneous bit rate of the signal is inversely related to the bit density of an image frame N frame periods later where N is determined by said bit density (Kirayama: column 7, lines 15-61; column 11, lines 30-54) as in the claim.

Regarding claims 10-11, the Kirayama method and apparatus discloses the deriving the second output bit-rate by changing the percentage of the first bit rate in response in response to changes in the first bit-rate so as to maintain a substantially constant fullness of the buffer (Kirayama: column 14, lines 55-65), as in the claims.

Kirayama discloses a method of compressing for transmission of an encoded digital bit stream having a variable bit rate (Kirayama: column 6, lines 65-68), comprising the steps of: detecting a first variable bit rate of the encoded digital bit stream (Kirayama: column 5, lines 21-25); sequentially writing the encoded digital bit stream into a buffer at the detected current bit rate (Kirayama: column 6, lines 24-29); reading the encoded digital bit stream out of the buffer at a buffer read rate (Kirayama: column 6, lines 45-55); and varying the buffer bit rate in such a manner as to maintain a substantially constant fullness level of the buffer in response to changes in

the detected bit rate (Kirayama: column 13, lines 30-65), wherein the buffer read bit rate is a percentage of the detected current rate, which percentage varies inversely in relation to the changes in the detected current bit rate (Kirayama: column 9, lines 63-68; column 10, lines 1-42), as in claim 12.

Regarding claim 14, Kirayama discloses that a delay between the input and output buffer varies as a function of the detected bit-rate (Kirayama: column 6, lines 55-61), as specified.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Rao whose telephone number is (703) 305-4813.

Patent Examiner
Anand Rao
Art Unit 2713

ANDY RAO
PRIMARY EXAMINER

asr
May 15, 2000